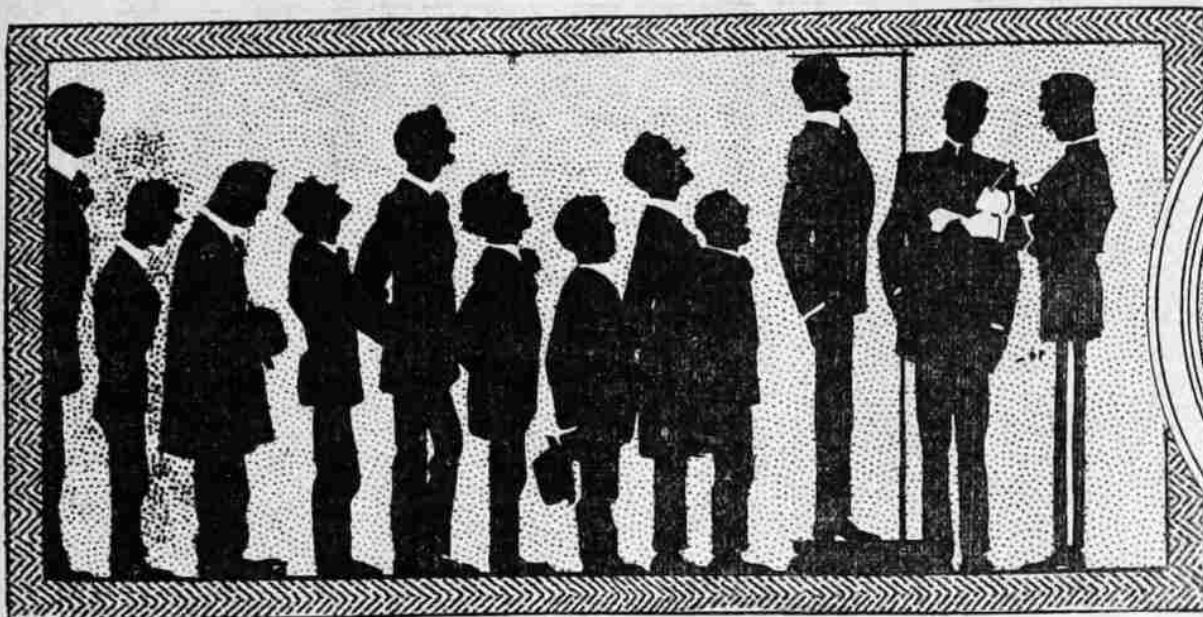
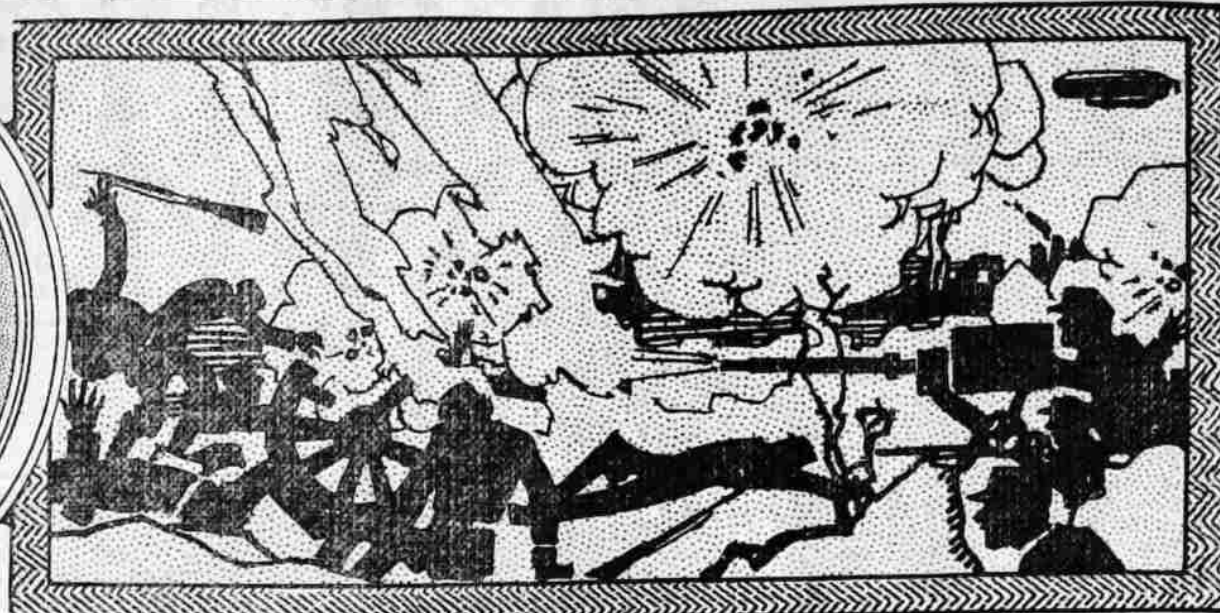


Magazine Feature Section



AFTER THE WAR!



The Great European Military Struggle Is Sure to Deplete the Physically Fit of Every Nation Engaged Thus Appreciably Reducing the Physical Proportions of the Coming Generation

How American Will Outpoint European Cousin Physically After War.

	American.	Present European.	European After War.
Average height	68.5 in.	67 in.	65 in.
Weight	150 lbs.	141 lbs.	136 lbs.
Strength of arms	1,491 lbs.	1,208 lbs.	836 lbs.
Strength of legs	2,195 lbs.	1,846 lbs.	1,428 lbs.
Strength of trunk	1,332 lbs.	1,090 lbs.	818 lbs.
Total body strength	5,018 lbs.	4,144 lbs.	3,082 lbs.
Chest measurement	34.2 in.	33.5 in.	32.5 in.
Chest expansion	3.5 in.	3.2 in.	2.8 in.
Lung capacity	240 cub. in.	225 cub. in.	205 cub. in.
Lung strength	81 mill.	72 mill.	60 mill.
Circumference of head	22 in.	21.5 in.	20.8 in.

Biologic measurements by Sir Francis Galton and others tend to show that the Napoleonic wars considerably lowered the stature of the French people. Measurements made at Smith College prove that the girls are larger than their mothers, who were of the civil war generation.

"War, from the eugenic point of view, is the height of folly, since presumably the brave and the physically fit march away to fight, while in general the unqualified stay at home to produce the next generation," says Herbert Eugene Walter, associate professor of biology at Brown University.

SURVIVAL OF THE UNFIT.

"When a soldier dies on a battlefield or in the hospital it is not alone a brave man who is cut off, but it is the termination of a probably desirable strain of germplasm. The thirty years' war in Germany cost 6,000,000 lives, while Napoleon in his campaigns drained the best blood of France.

"David Starr Jordan has presented this matter very clearly. He points out that the 'man with a hoe' among the European peasantry is not the result of centuries of oppression, as he has been pictured, but rather the dull progeny resulting from generations of the unfit who were left behind when the fit went off to war never to return.

"Benjamin Franklin, with characteristic wisdom, sums up the situation in the following epigram: 'Wars are not paid for in war time; the bill comes later.'

What will be the effect on stature of the great conflict now raging across the seas? A conclusion based on scientific analysis would show a general undermining of physical well-being. The American, who today is one and a half inches taller and nine pounds heavier than his average European cousin, would retain his supremacy for many generations to come, if not for all time.

Not only that, but the American will dominate in brain power, says Dr. William S. Sadler, who adds that with a decrease in stature will come a decrease in head circumference.

WAR DEMANDS IDEAL FATHERS.

"Men who go to war are men of initiative, superior intelligence, strong character and high-grade mental activity," declares Dr. Sadler. "Having all these mental traits in combination with an excellent physique, they represent the ideal fathers for the next generation from the mental, moral and physical standpoint.

"Those left behind are the physically weak, the mentally defective, the intellectual drones, the unpatriotic, and the indifferent ne'er-do-wells; also the aristocrats, who may be termed as good, bad or indifferent."

NEW GENERATION PAYS.

"Hence the conclusion: 'The coming generation may not only be two inches shorter in stature but a greater calamity—the next generation will be less intelligent, less possessed of an adventurous spirit and an all-around clear-sightedness, not to mention keenness of judgment and depth of reasoning.

"In other words, the price the next generation must pay will not only be the liquidation of the war debt but a setback in commercial, social, artistic and spiritual development, as the result of heightening the biological inferiority in the racial strains of the various peoples and nations concerned."

And Dr. Sadler reasons that America will be the predominant people intellectually because of these things. He also agrees with the scientists who contend that the next generation of Europeans will be smaller in stature than those of the present day.

Dr. Sadler has in his possession some figures based on an exhaustive research of the findings that have been worked out by the United States army and navy, and by the leading gymnastiums, universities and physical educational societies of America and Europe.

AMERICANS NOW LEAD.

These figures show the average and normal American man to be 5 feet 8½ inches in height and to weigh 150 pounds in his clothing. The average and normal European man of the present day is 5 feet 7 inches tall and weighs 141 pounds. Supposing that the war lasts three years, and that the supply of physically fit is materially depleted, about what loss will there be to the stature of the men of Europe?

About two inches is the prevailing belief of scientists well versed in eugenics. Dr. Sadler does not think this is a too radical prediction. Granting it to be true, following would be the results of a physical test made by the average American man and the average European man as gleaned from the figures in the possession of Dr. Sadler:

The American would show a total strength in his arms of 1,491 pounds, while his competitor would only show 836 pounds. The Yankee's legs would show strength of 2,195 pounds and the European's but 1,428; the trunk 1,332 pounds, as against 818. Therefore, the total bodily strength of the American would be 5,018 pounds, while that of the other would be only 3,082.

The big difference in physical development would be apparent in measurements of the chests of the two men. The subject of Uncle Sam would measure 34.2 inches, but the best the European could do would be 32.5. In chest expansion, too, the American would sadly handicap the man whose parents were those physically unfit to fight the battles of the previous generation. The American could expand his chest 3½ inches and the European only 2.8 inches. Which would make the future men of our country less susceptible to the ravages of tuberculosis and pneumonia.

GREAT DIFFERENCE IN TYPE.

Now, to illustrate the difference in lung capacity and strength of the two types of men as shown by the

chart. The capacity of those possessed by the American would be 240 cubic inches and those of the European 205 cubic inches. The lung strength of the American would be 81 millimeters of mercury and that of his competitor in physical examination only 60 millimeters.

The circumference of the Yankee's head would be 22 inches. That of the man from over the seas would be 20.8 inches.

Aroused by steps taken by Germany and France to protect themselves against a falling birth rate and the telling death rate incidental to the war, England is said to have encouraged the marriage of recruits destined for foreign service. Correspondents have told us that at the suggestion of the Bishop of Canterbury the diocesan bishop of the

Church of England have made marked decreases in the fees charged soldiers for marriage licenses and clergymen are waiving their personal fees.

"BREED BEFORE BATTLE" DECREED.

In Germany and Austria, it is said, fees for marriages have been waived entirely where soldiers and sailors were unable to pay, and in many cities clergymen married the warriors and their sweethearts in large companies where the hasty departure of troops made it impossible for separate ceremonies to be held. German officials frankly discussed the necessity for the marriage of soldiers and urged immediate ceremonies upon the young women as a patriotic duty.

This policy has met with the

stern disapproval of those versed in eugenics. They ask this question: What will be the result of these hasty marriages? And they answer it themselves: Weaklings born of half-starved, sorrowful mothers.

Not only will the people of the United States predominate physically and mentally, as say the eugenicists, but optimistic predictions are made that it will profit materially in a business sense. The most remarkable and desirable immigration that this country has ever seen is a result forecast by Edward E. Gore, chairman of the executive committee and former vice president of the Chicago Association of Commerce.

"There will come to us from Europe those skilled workmen who have been dispersed by the war, taken away from their places of em-

ployment," he said. "People there will find the factory organization of which they formerly were a part like-wise has been scattered—superintendents and foremen lying in graves in foreign lands, fellow workmen maimed and unable to work—and you know that factory organization consists more of the men than the building or machinery. PREDICTS RUSH TO AMERICA.

"These men in order to get work immediately will come to America, where manufacturing organizations are working, and we will see such an inflow of desirable immigrants as we have never seen before. Every city of this country is going to have its part in receiving that immigration."

Eugenists and others only quali-

fy their statement that we shall predominate after the great conflict across the sea with one statement: IF WE KEEP OUT OF STRIFE OURSELVES.

GERMAN SPY SYSTEM.

The high-class German spy cannot afford to follow any occupation that demands regular hours, or that would prevent him from absenting himself from his post for days or weeks at a time. The high-class spy, therefore, usually poses as a gentleman of leisure, having plenty of money, and tries to move in circles where his movements are not the subject of comment.

He must be an educated man, and he undergoes a harder training than a German army officer. He must be a qualified surveyor, able to make plans of areas of ground from observation, and often without instruments. He must also be a capable photographer, and in addition able to judge distance under all conditions of light. It was a highly competent spy, for instance, who was set by his government to study the Forth Bridge, and to report how and where men could be placed upon the bridge with a view to its instant destruction. He had to determine the geological nature of the land upon which the bridge's foundations were built and estimate exactly the quantities of explosive necessary for its destruction. He had to secure all this information without being observed, and he did so. By pacing the bridge he estimated its length to a matter of yards, and calculated its height to a foot.

MILITARY AND NAVAL EXPERT.

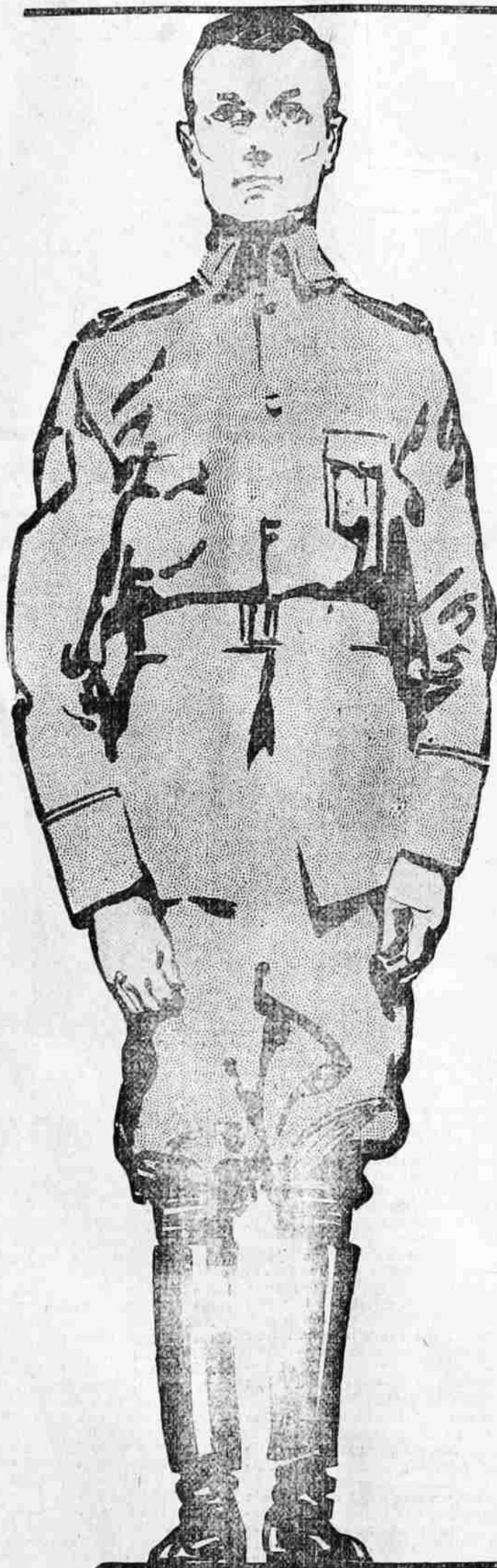
Probably one could turn up any volume of ready reference and find out exactly the length and height of the bridge, and it would appear that the spy in question took a lot of unnecessary trouble. But the German government does not accept as accurate information published about other countries. It suspects that in many cases statistics are given with the purpose of deceiving possible enemies. At any rate, it always checks up information that is at the disposal of the public. Probably it would not accept the official figures giving the population of the city of Toronto without devising some more or less intricate scheme for verifying them. The military spy must not only be a surveyor, a photographer, a geologist and several other things, but he must be an expert upon all the different units of the army of the country in which he operates. He must know these units by sight, and must carry in his memory the code word corresponding to each of them. Similarly he must know the code words for the different kinds of guns and for each class of ship in the enemy's fleet. Should he by any chance be able to get a glimpse of a fortification from the inside he must be able from memory to draw a plan of the works.

Moreover the information that he is able to secure must be absolutely reliable. Inaccurate information is worse than none at all. It is obvious that the chief spy must be a good linguist, and a man able to mix unsuspected in any society. He must be what is commonly called a "gentleman" though British people would not readily accustom themselves to the idea of a gentlemanly spy. In Germany, however, there is no prejudice against the spy. The end justifies the means, and the spy who succeeds is as greatly honored as the army or navy officer who distinguishes himself in the field of battle. Steiber, the man who founded the German spy system, was reckoned one of the great men of his time, and both Bismarck and Moltke publicly admitted that the Prussian kingdom owed him a debt of gratitude it could never repay for his invaluable services in France.

The number of really high-class spies in the service of Germany is at no time very great, for only men of very unusual gifts are qualified for this sort of espionage. They rank above the spy who has a fixed post, and who becomes outwardly a French or British citizen, and establishes himself in business in an enemy country for the sole purpose of picking up information. Under this spy come the rank and file of the army of information, the waiters, the barmaids, the women in less reputable employments, workmen and even navvies. Their information is first given to the fixed post spy, and he forwards it to headquarters. He is paid a regular salary, and pays those who work for him according to the value of the information they can secure. It is plain that one of the great failures in the present war has been the collapse of the German spy system. The long sequence of diplomatic blunders that Germany made were probably due not to the innate stupidity of the diplomats, but to the inability of the spies to understand what they saw.

EUROPEAN

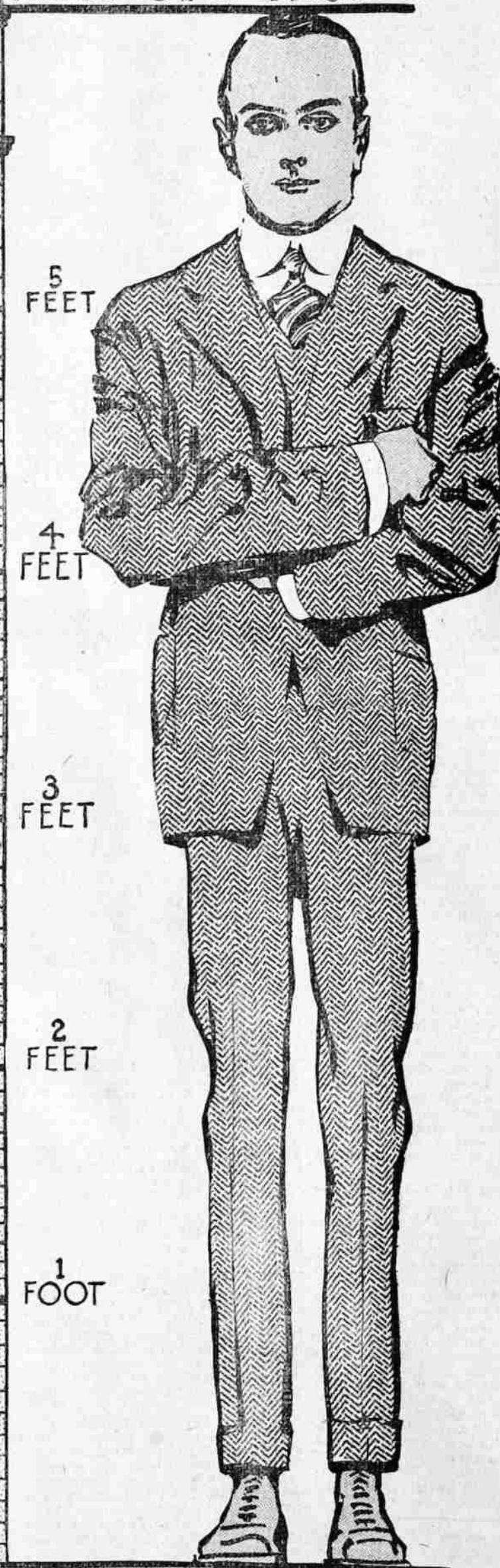
5 FEET 5 INCHES HIGH



136 POUNDS

AMERICAN

5 FEET 8½ INCHES HIGH



150 POUNDS